

Status of Argo Norway, 13th March 2015

The Institute of Marine Research (IMR) is involved in the international Argo programme with contribution of Argo floats, ship time for deployment and user of the data. At present, IMR is the only institution in the Argo Norway.

1. The status of implementation

At present we have in total purchased and deployed 15 floats, all in the Norwegian Sea. Three floats were deployed in 2002, six floats in 2003, two floats in 2006 that included oxygen and fluorescence sensors, and four floats in 2010 that also included oxygen and fluorescence sensors. In 2013 two floats were deployed in the Norwegian Sea that included oxygen and fluorescence sensors, in 2014 six floats were deployed, 2 in the Irminger Sea that include oxygen and 4 in the Norwegian Sea that included oxygen and fluorescence sensors. In 2015 we plan to deploy 3 floats in the Norwegian Sea. All floats are APEX floats and the last years we have only deployed floats with Iridium telemetry. At present only two of our floats are active.

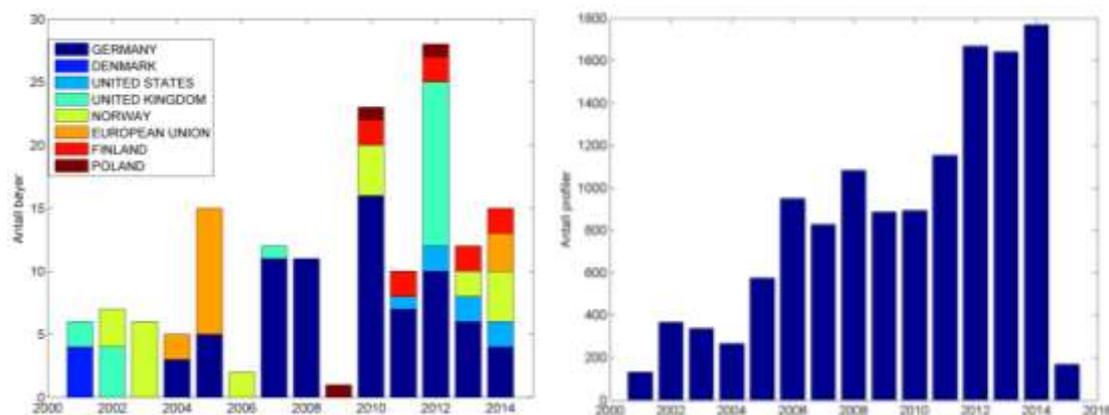


Figure 1. Left: Number of Argo floats deployed in the Nordic Seas. Right: Number of profiles in the Nordic Seas (updated 29. January 2015).

Delayed mode quality control

Regarding the “Delayed mode” Argo Germany do delayed mode quality control for all floats in the Nordic Seas including our floats.

2. Present level of and future prospects for national funding for Argo

The funding was self-financed (i.e. funded by our institute) until 2012. In 2012 IMR received funding from the Norwegian Research Council (NRC, Ministry of Education and Research) for funding of three Argo floats per year the next three years (2013-2015). The future funding of Argo is uncertain, but this will be discussed the next months between several Norwegian research institutes.

3. Summary of deployment plans

With the funding from NRC we plan to deploy three APEX floats in the Norwegian Sea in 2015. Some of these floats will include oxygen and fluorescence sensors. These floats will be deployed within the Nordic Seas where the needs are largest.

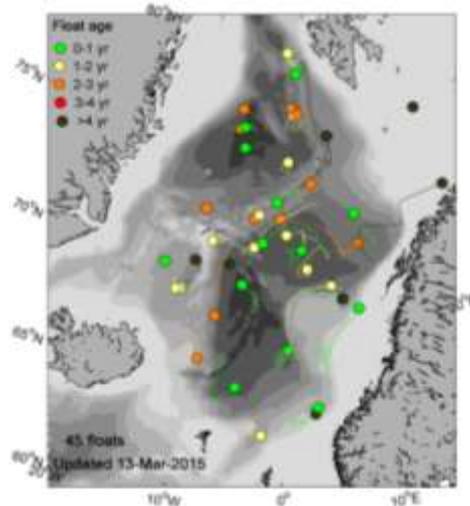


Figure 2. Active Argo floats within the Nordic Seas, updated 13th March 2015. The colours indicate age in years while the thin lines (for some floats) are the drift over the last 2 months.

4. Summary of national research and operational uses of Argo data

ARGO Norway focuses on both research topics and marine climate monitoring of the Nordic Seas. Approximately 3 scientists in 3 projects are directly involved in Argo Norway but also other people contribute with technical expertise, data management, ship time for deployments, and processing and analysing the data. There is an increasing interest in using Argo data in Norway, and two climate centres are now using the data operationally in climate models.

The present scientific topics are mainly within the Nordic Seas (Norwegian, Iceland and Greenland Seas) and include:

- Studies of the deep ocean circulation in the Nordic Seas. These studies have so far brought new insights in the circulation of the Nordic Seas.
- Water mass changes and also in relation with biological activities. This topic is also one of the reasons that we have included both oxygen and fluorescence sensors on our Argo floats.
- Studies that involve changes in the mixed layer.

5. Issues we wish to be considered and resolved

At the moment we have no suggestion.